#### Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

### **Listing of Claims:**

- Claim 1 (Currently Amended)
- Claim 2 (Currently Amended)
- Claim 3 (Currently Amended)
- Claim 4 (Currently Amended)
- Claim 5 (Currently Amended)
- Claim 6 (Currently Amended)
- Claim 7 (Currently Amended)
- Claim 8 (Currently Amended)
- Claim 9 (Currently Amended)
- Claim 10 (Currently Amended)
- Claim 11 (Currently Amended)
- Claim 12 (Original)
- Claim 13 (Currently Amended)
- Claim 14 (Currently Amended)
- Claim 15 (Currently Amended)
- Claim 16 (Currently Amended)
- Claim 17 (New)
- Claim 18 (New)
- Claim 19 (New)
- Claim 20 (New)

#### **CLAIMS:**

Amend the claims as follows:

### 1. (Currently Amended)

An self-enhancing search system comprising:

a search system analog analysis system that periodically looks through a log for search queries for the search system log and identifies for analyzing, unsatisfactory search queries that do not bring satisfactory results;

a search query analyzer using one or more of the glossary terms, synonyms, known typographical errors and translated words to provide alternative query terms to original search terms in the unsatisfactory search queries;

<u>a</u> relevant document finder based on enhanced queries including the alternative query terms to locate <u>relevant</u> documents not found <u>by when</u> the <u>unsatisfactory original identified</u> search <u>queries were used</u>; and

a <u>linking meta-data enhancer</u> linking enhanced query terms <u>in</u>

<u>documents not found by the unsatisfactory search queries</u> with the original search terms to <u>reflect include</u> new keywords to be <u>automatically</u> searched <u>by</u>

<u>the search system when original search terms are used in a future query</u>.

# 2. (Currently Amended)

The search system of claim 1, wherein the <u>unsatisfactory</u> search queries and <u>future queries</u> are queries made by customers.

The search system of claim 2 including embedding the search query terms of the unsatisfactory search unsatisfied queries in the documents located by the enhanced queries.

### 4. (Currently Amended)

The search system of claim 3 including associated associating enhanced queries with the unsatisfactory search queries in the search system log for use with further queries.

### 5. (Currently Amended)

The search system of claim 4 including ranking the results of searches using both the unsatisfactory and the enhanced queries.

### 6. (Currently Amended)

The search system of claim 5, wherein Query Analyzer module the search query analyzer comprises a module including:

a sub-module that identifies domain specific terms in a given query, using domain specific glossary;

a sub-module that finds synonyms and related terms for the identified terms, using domain specific thesaurus;

a sub-module that finds other statistically close terms; and

a sub-module that identifies relevant domain specific categories for the identified terms, using domain specific ontology.

The search system of claim 6, wherein the <del>Document Finder module</del> document finder comprises a module including the following sub-modules:

a sub-module that finds documents in the identified categories, using the an original textual index; and

a sub-module that filters the found documents to find additional relevant documents, based on the identified domain specific terms, synonyms, related terms, and statistically close terms.

### 8. (Currently Amended)

The search system of claim 7, wherein the Index/Meta-data Enhancer module linking meta-data enhancer comprises a module including the following sub-modules:

a sub-module that creates associations (links) between each found document and the given query; and

a sub-module that adds new doc-query links to the meta-data of the corresponding textual index entries.

A computer program on a computer useable medium for providing a self-enhancing search system comprising:

a search system analog system software module that periodically looks through a log for the search system log and identifies for analyzing unsuccessful search queries that do not bring satisfactory results turn up less than a specified number of references;

a search query analyzer software module using one or more of the glossary terms, synonyms, known typographical errors, and translated words to provide alternative query terms;

relevant document finder software module based on enhanced queries including the alternative query terms to locate <u>relevant</u> documents not found by <u>using said unsuccessful</u> the <u>original</u> search <u>queries</u>; and

a linking software module <u>linking</u> enhanced query terms with the original search terms to-reflect <u>include</u> new keywords to be searched <u>automatically by the search system if original search terms are used in a future query</u>.

## 10. (Currently Amended)

The computer program for search system of claim 9, wherein the <u>unsatisfactory</u> search queries are queries made by customers.

The computer program for the search system of claim 10 including software for embedding the search query terms of the unsatisfied queries in the documents located by the enhanced queries.

### 12. (Original)

The computer program for search system of claim 11 including software for providing associated enhanced queries with the unsatisfactory queries in the search system log for use in connection with further customer queries.

### 13. (Currently Amended)

The computer program for the search system of claim 12 including software for ranking the results of searches in order of their per tenancy pertinency using the enhanced query terms as a ranking basis.

### 14. (Currently Amended)

The computer program for search system of claim 13, wherein the search Query Analyzer query analyzer software module comprises:

a software sub-module that identifies domain specific terms in a given query, using domain specific glossary;

a software sub-module that finds synonyms and related terms for the identified terms, using domain specific thesaurus;

a software sub-module that finds other statistically close terms; and

a software sub-module that identifies relevant domain specific categories for the identified terms, using domain specific ontology.

## 15. (Currently Amended)

The computer program for the search system of claim 14, wherein the Document Finder including a document finder module that comprises the following software sub-modules:

a software sub-module that finds documents in the identified categories, using the original textual index; and

a software sub-module that filters the found documents to find additional relevant documents, based on the identified domain specific terms, synonyms, related terms, and statistically close terms.

## 16. (Currently Amended)

The computer program for the search system of claim 15, wherein the Index/Meta-data Enhancer a meta-data enhancer module comprises the following sub-modules:

a software sub-module that creates associations (links) between each found document and the given query; and

a software sub-module that adds new doc-query links to the meta-data of the corresponding textual index entries.

#### 17. (New)

an self-enhancing search system comprising:

a search system analysis system that periodically looks through the search system log and identifies for analysis unsatisfactory search queries that do not cite more than a specified number of documents;

a search query analyzer using one or more of the glossary terms, synonyms, known typographical errors, and translated words to provide alternative query terms to original terms of the unsatisfactory search queries;

a relevant document finder based on enhanced queries including the alternative query terms to locate relevant documents not found by the original search; and

a meta-data enhancer creating separate enhanced links to one or more of said relevant documents linking to said relevant documents the original terms of the unsatisfactory search queries so that future search queries using the original terms will result in finding said relevant documents not found by the unsatisfactory search queries.

### 18. (New)

The search system of claim 17 wherein, said meta-data enhancer links the enhanced query terms to the original query terms to locate said relevant documents.

### 19. (New)

The search system of claim 18, wherein the relevant document finder comprises the following sub-modules:

a sub-module that finds documents in the identified categories, using the original terms; and

a sub-module that filters the found documents to find additional relevant documents, based on enhanced terms including one or more of domain specific terms, synonyms, related terms, and statistically close terms.

### 20. (New)

The search system of claim 19, wherein the index meta-data enhancer comprises the following sub-modules:

a sub-module that creates associations (links) between each found document and the original query; and

a sub-module that adds new links to the meta-data of the corresponding textual index entries.